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| EXAMINER | | | | |
| WOLDEMARIAM, AKILILU K | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/573,429

Applicant(s)

SCHIEHLEN, MATTHIAS

Examiner

AKLILU k. WOLDEMARIAM

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-19 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 24 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-85/86)
Paper No(s)/Mail Date 03/24/2006
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 03/24/2008 was filed after the mailing date of 03/24/2008. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 3, 7 and 17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. *In claim 3 line 2, claim limitation, "characterized in that the concept information describes the syntax and/or the semantics of the database field" these claim limitation does not have three separate embodiments to enable as described in original specification, [see paragraph [0040]]. In claim 7, line 2, claim limitation, "characterized in that the limiting characters include empty characters*

and/or punctuation marks." These claim limitation does not have three separate embodiments to enable as described in original specification, [see paragraph [0040], [0046] and [0064]]. In claim 19, line 2, claim limitation "characterized in that the system has an input device (17) in the form of a mouse (6) and/or keyboard (7)." These claim limitation does not have three separates embodiments to enable the claim limitation as described in original specification, [see paragraph [0046] and [0064]].

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-15 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. Supreme Court precedent¹ and recent Federal Circuit decisions² indicate that a statutory "process" under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing. While the instant claim(s) recite a series of steps or acts to be performed, the claim(s) neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process. Method claims are an abstract idea without a processor or a computer or a device.

¹ *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

² *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

7. *Claims 1-19 are rejected under 35 U.S.C. 101 because "machine-readable is broader than "computer readable medium." Therefore the claimed inventions are directed to non-statutory subject matter.*
8. *Claim 19 is rejected under 35 U.S.C. 101 because computer program does not have computer readable medium to store a computer program. Therefore the claimed invention is directed to non-statutory subject matter.*

Claim Rejections - 35 USC § 103

9. *The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:*

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. *Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellavita et al., "Bellavita" (U.S. Publication number 2002/0141660A1 from IDS) in view of Sang, Jr. et al., "Sang" (U.S. Patent number 5317, 646 from IDS).*

Regarding claim 1, [Claim examined as best understood by examiner], Bellavita discloses method for acquiring data from machine-readable documents, the data being assigned to a database (see item 42, fig.1 form database and paragraph [0035] There are two mechanisms which the operator may utilize to input form document information into computer system scanner 10. In one methodology, a form document is scanned by scanner system 10 and machine-readable documents referred to computer system scanner 10).

by extracting individual data from the document as automatically as possible and entering them into corresponding database fields (*see item 46, field extraction and item 42, formsdatabase and paragraph [0026] form processing unit 40 maintains a forms database 42 in a computer memory*), and,

displaying of the document on a display screen (*see item 84, display, fig.1*), execution of a proposal routine with which string sections in the vicinity of a pointer on the display screen that can be moved by a user are selected, marked, and proposed for extraction (*see item 84, display, item 88, pointer device, fig.1 and paragraph [0023] Software and hardware*).

Bellevita does not disclose if data cannot be extracted from a document with the required degree of reliability for one or more particular database fields, executing the following steps:

indication on the display screen of the database field for which the data cannot be extracted with the necessary degree of reliability

However, Sang discloses if data cannot be extracted from a document with the required degree of reliability for one or more particular database fields (*see column 4, lines 36-53, Data Verification Block 500 determines if the information extracted from the several smaller bitmaps is valid. If not, the data is sent to Manual Correction block 600 for further inspection by an operator and degree reliability referred to data verification and display discussed in reference Bellavita*), executing the following steps:

indication on the display screen of the database field for which the data cannot be extracted with the necessary degree of reliability (*see column 4, lines 36-53, Data*

Verification Block 500 determines if the information extracted from the several smaller bitmaps is valid. If not, the data is sent to Manual Correction block 600 for further inspection by an operator and degree of reliability referred to data verification and display discussed in reference Bellavita).

It would have been obvious to ordinary skill in the art at the time when the invention was made to use Sang's if data cannot be extracted from a document with the required degree of reliability for one or more particular database fields in Bellavita's method for acquiring data from machine-readable documents, the data being assigned to a database because it will allow or the use of a lower resolution graphic workstation display, hence reducing the cost of the system, [Sang , column 4, lines 14-15].

Regarding claim 2, *Bellavita discloses* method according to Claim 1, characterized in that the string section is selected, marked, and proposed for extraction in accordance with concept information assigned to the database field (*see item 42, form database, fig.1 and paragraph [0048] After one of the plurality of forms is selected, the data from each data field in the scanned document image is extracted via field extraction unit 46 and [0050]*).

Regarding claim 3, *Bellavita discloses* method according to Claim 2, characterized in that the concept information describes the syntax and/or the semantics of the database field, so that the proposal routine selects and marks a string section that is to be marked in a manner corresponding to the syntax or to the semantics of the respective database field (*see item 110a, letters and item 120, optic mark, fig.2 and paragraph [0042] and [0043]*).

Regarding claim 4, *Bellavita discloses* method according to Claim 3, characterized in that the information concerning syntax describes the number of numerals and/or letters and/or predetermined formats of the string section that is to be read (*see item 110a, fig.2, letters*).

Regarding claim 5, *Sang discloses* method according to Claim 3 or 4, characterized in that the information concerning semantics describes specified terms, for example using a lexicon (*see items 1200 and 1240, fig.4, Lexicon*).

Regarding claim 6, *Bellavita discloses* method according to one of Claims 1 to 5, characterized in that a string section is selected that is situated between two limiting [or: boundary] characters (*see paragraph [0043] Data select function 120 enables the operator to select the type of data for each data field and data field 117 has been characterized as a bar code information and paragraph [0044] Delimiting characters indicate the separation between records or separation between each input document and delimiting characters referred to boundary*).

Regarding claim 7, *Bellavita discloses* method according to Claim 6, characterized in that the limiting characters include empty characters and/or punctuation marks (*see paragraph [0044] Delimiting characters indicate the separation between records or separation between each input document and delimiting characters referred to limiting characters*).

Regarding claim 8, *Bellavita discloses* method according to one of Claims 1 to 7, characterized in that the text of documents in graphic representation is first converted into coded text using an OCR method, and the proposal routine represents,

in addition to the marked string section in graphic representation, the coded text of this string section (*see item 50, fig.1 OCR and paragraph [0044] character string in the first position, a digital value for the optical tick in the second position, a numeric character string in the third position, decoded bar code information in the fourth string, followed by delimiting characters CR-LF. Other delimiting characters may be utilized).*

Regarding claim 9, *Bellavita discloses* method according to one of Claims 1 to 7, characterized in that in addition to the marked string section, this string Section is displayed again on the display screen in an enlarged representation (*see item 84, fig.1, display and paragraph [0023] a user interface system 82 includes display, keyboard 86 and pointer device 88)*

Regarding claim 10, *Bellavita discloses* method according to one of Claims 1 to 9, characterized in that after the marking of a string section, the proposal routine activates a function with which the content of the marked string section is transferred into the database through the actuation of one or more predetermined keys (*see paragraph [0047] The scanned image may be part of the delimited character string. After the scanned image has been rotated to the correct point, form processing unit 40 compares various field descriptors from stored forms in forms database 42 with the scanned document image and paragraph [0048] After one of the plurality of forms is selected, the data from each data field in the scanned document image is extracted via field extraction unit 46).*

Regarding claim 11, *Bellavita discloses* method according to one of Claims 1 to 10, characterized in that during the execution of the proposal routine, after the

movement of the pointer a predetermined time wait interval is observed, during which the pointer must not be moved, before a string section is selected (*see item 88, fig. 1, pointer device and paragraph [0023] pointer device (for example, a mouse, track ball and etc).*

Regarding claim 12, *Bellavita discloses* method for acquiring data from machine-readable documents, the data being assigned to a database, in particular according to one of Claims 1-11, characterized in that after data have been read from a first table row into corresponding database fields, the further table entries are automatically determined through a comparison of string sections situated under the last table row with the string sections of the first table row, which correspond to the read-in data, and these additional table entries are automatically extracted (*see paragraph [0047] The scanned image may be part of the delimited character string. After the scanned image has been rotated to the correct point, form processing unit 40 compares various field descriptors from stored forms in forms database 42 with the scanned document image and paragraph [0048] After one of the plurality of forms is selected, the data from each data field in the scanned document image is extracted via field extraction unit 46).*

Regarding claim 13, *Bellavita discloses* method according to Claim 12, characterized in that the comparison between the string sections takes place using a string matching method (*see paragraph [0047] The scanned image may be part of the delimited character string. After the scanned image has been rotated to the correct*

point, form processing unit 40 compares various field descriptors from stored forms in forms database 42 with the scanned document image).

Regarding claim 14, Bellavita *discloses* method according to Claim 12 or 13, characterized in that the determined table entries are marked (*see paragraph [0043] marks and table*).

Regarding claim 15, *Bellavita discloses* method according to Claim 14, characterized in that functions are provided for editing the marked table entries (*see paragraph [0043] marks and table*).

Regarding claim 16, *Bellavita discloses* System for acquiring data from machine-readable documents, comprising a computer (12) having a storage device (13) and a CPU (14), a software product for executing the method according to one of Claims 1-15 being stored in the storage device (13) (*see paragraph [0023] software in documents scanner 10, are illustrated in fig.1 and paragraph [0026] form processing unit 40 maintains a forms database in a computer memory*).

Regarding claim 17, *Bellavita discloses* System according to Claim 16, characterized in that the system has an input device (17) in the form of a mouse (6) and/or keyboard (7) (*see fig.1 item 86, keyboard and item 88, pointer device referred to mouse, fig.1*).

Regarding claim 18, *Bellavia discloses* System as recited in Claim t 6 or 17, characterized in that the system has a scanner (16) for the optical scanning of documents (*see paragraph [0026] data field images in the scanned input document and paragraph [0045] scanner system*).

Regarding claim 19, *Bellavia discloses* computer program products that, in its storing and execution on a computer (12), effects a method according to one of Claims 1 to 15 (*see paragraph [0023] software in documents scanner 10, are illustrated in fig.1 and paragraph [0026] form processing unit 40 maintains a forms database in a computer memory*).

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to AKLILU K. WOLDEMARIAM whose telephone number is (571)270-3247. The examiner can normally be reached on Monday-Thursday 6:30 a.m.-5:00 p.m EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samir Ahmed can be reached on 571-272-7413. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner
Art Unit 2624

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Examiner, Art Unit 2624
12/24/2008

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